



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,214	08/22/2006	Pierre Girard	1032326-000405	6719
21839 7590 12/28/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER TABOR, AMARE F	
			ART UNIT 2139	PAPER NUMBER
			NOTIFICATION DATE 12/28/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com
debra.hawkins@bipc.com

Office Action Summary

Application No.

10/590,214

Applicant(s)

GIRARD, PIERRE

Examiner

Amare Tabor

Art Unit

2139

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08/22/2006.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are examined.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/590,214, filed on 08/22/2006.

Specification

3. The disclosure is objected to because:

- a. Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
 - (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
 - (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
 - (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
 - (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
 - (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
 - (g) BRIEF SUMMARY OF THE INVENTION.
 - (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
 - (i) DETAILED DESCRIPTION OF THE INVENTION.
 - (j) CLAIM OR CLAIMS (commencing on a separate sheet).
 - (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

b. Claim & Specification

Claims 1-20 are objected to because of the following informalities: the specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). For example, the claims use the language "said hardware, said storage and said method" repeatedly. Additionally, claim 12 recites "first value (VB1)" and "second value (VB2)", which lacks proper antecedent basis.

For examining purposes the phrase "and/or" in claims 1-20, is considered as "and" or "or" or "and/or" as applicable.

Appropriate correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description and enablement requirements. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In a preliminary amendment to the claims and the specification filed on 08/22/2006, Applicant requested to insert the headings **Background of the Invention** (in page 1, line 4) and **Description of the Invention** (in page 6, between lines 13 and 14). The part of the disclosure that Applicant referred as Description of the Invention (starting from page 6, line 14 to page 11, line 25 of the disclosure) is a direct copy of the original claims 1 through 12 (see pages 12 to 16). This section does not describe the invention in detail description; however, it merely presents the claims as a summary of the invention.

Thus, the section can not be referred as Description of the Invention, but it could be referred as **Brief Summary of the Invention** (see item number (g) in the 2nd page of this office action). Therefore, if the heading **Description of the Invention** is inserted in page 10, between lines 25 and 26, only the two remaining paragraphs of the disclosure can be referred as Description of the Invention. The last two paragraphs (page 10, line 26 to page 11, line 25) describe two examples which are related to claims presented in claims 10-12. Since the section that Applicant referred as Description of the Invention is an exact duplicate of the independent and dependent original claims listed from page 12 to 16, Examiner considers the disclosure of the invention as having only two parts: BACKGROUND OF THE INVENTION and CLAIMS (see items (f) and (j) above). In conclusion, the disclosure of the invention does not have sections that would support the claims in detailed explanation; i.e., it does not contain the two important parts of a specification (DETAILED DESCRIPTION and DRAWINGS, see item numbers (h & i) in the 2nd page of this office action), that would enable a person of skill in the art to understand the subject matter of Applicant's invention. Therefore, claimed invention presented in claims 1-20 clearly lacks the written description and enablement requirements.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9 and 13-20 are rejected under 35 U.S.C. 102(a) and/or 102(e) as being anticipated by Wildish et al. (US 2003/0115457 A1, referred as "**Wildish**" hereinafter).

As per Claim 1, Wildish teaches,

A method of producing a digital certificate in which a certification authority performs the steps of grouping together, in a data set (see *abstract and Fig. 5*), a public key and digital data comprising data identifying the proprietor of the said public key and of an associated private key (see *ID1, ID2, ID3, Public key in Fig. 5*; and for example, *paragraph [0033]*), signing the data set in order to produce a digital certificate (see for example, *paragraphs [0004] & [0008]*), and storing the signed data set in a computer-readable storage medium (see *DATA 28 in Fig. 5*), wherein the digital data also comprise data identifying at least one of means of generating the private key (see *KEY PAIR GENERATOR 27 in Fig. 1*; and for example *paragraph [0008]*), means of storing the private key on a medium, and means of signing with the private key (see *Fig. 4 and DATA 28 and CPU 20 in Fig. 5; where keys are stored and signed*; and for example, *paragraph [0030]*).

As per Claim 8, Wildish teaches,

A digital certificate stored in a computer-readable medium (see *abstract and Fig. 5*), comprising: a public key (see *Public Key*), data identifying a proprietor of the public key and of an associated private key (see *ID1-ID3*), and data identifying at least one of means of generating the private key (see *KEY PAIR GENERATOR 27 in Fig. 1*; and for example *paragraph [0008]*), means of storing the private key on a medium, and means of signature with said private key (see *DATA 28 and CPU 20 in Fig. 5; where keys are stored and signed*).

As per Claim 2, Wildish teaches,

in which the data identifying the means of generating the private key comprise data identifying: a method of generating the private key (see *paragraph [0008]*) and/or hardware on which the method of generating the private key is implemented, and/or a place on which the method of generating the private key is implemented (see *KEY PAIR GENERATOR in Fig. 5*).

As per Claims 3 and 13, Wildish teaches,

in which the data identifying the means of storing the private key comprise data identifying: a method of storing the private key on a medium (see *DATA 28 in Fig. 5*), and/or hardware on which the method of storing the private key is implemented, and/or a place on which the method of storing the private key is implemented (see for example, *paragraphs [0011]-[0012] and [0033]*), and/or a storage medium on which the private key is stored (see *KEY PAIR GENERATOR and DATA 28 in Fig. 5*).

As per Claims 4 and 14-15, Wildish teaches,

in which the data identifying the signature means comprise data identifying: a signature method using the private key (see *Fig. 2*), and/or a memory medium on which the said signature method is stored (see *DATA* in *Fig. 5*; for example, *paragraphs [0011]-[0012] and [0033]*).

As per Claims 5 and 16-17, Wildish teaches,

in which the data identifying hardware or a storage medium comprise: a reference identifying the said hardware or the said storage medium, and/or an identification of a manufacturer of the said hardware or of the said storage medium (see *Fig. 3 & 4*; and for example, *paragraphs [0029] to [0031]*), and/or an indication of a security level of the said hardware or of the said storage medium defined according to a standard ISO 15408 (see *paragraphs [0005] & [0011]*; where security protocols are disclosed).

As per Claims 6 and 18-20, Wildish teaches,

in which the data identifying a method comprise: a reference identifying the said method (see *abstract*; *Fig. 2*; and for example, *paragraphs [0008], [0010], [0012], [0019]-[0020], [0026] & [0031]-[0032]*), and/or an identification of an inventor of the said method (see *RANDOM NUMBER GENERATOR 26* in *Fig. 5*), and/or an indication of a security level of the said method according to ISO 15408 (see *paragraphs [0005] & [0011]*; where security protocols are disclosed).

As per Claim 7, Wildish teaches,

in which the data identifying a place comprise: an identification of the said place, and/or an identification of a security level of the said place according to ISO 15408 (see *paragraphs [0005] & [0011]*; where security protocols are disclosed).

As per Claim 9, Wildish teaches,

of the X509 type according to a standard Information Technology - Open Systems Interconnection - The Directory : Public Key and Attribute Certificate Frameworks, dated March 2000, of the International Telecommunication Union, in which a set of predefined free fields are used to store the digital data identifying (see *Fig. 1*; and for example, *paragraphs [0005] and [0019]*): a method of generating the private key, and/or hardware on which the method of generating the private key is implemented, and/or a place on which the method of generating the private key is implemented (see *KEY PAIR GENERATOR 27* in *Fig. 5*), and/or a method of storing the private key on a medium, and/or hardware on which the method of storing the private key is implemented (see *KEY PAIR GENERATOR* in *Fig. 5*),

and/or a place on which the method of storing the private key is implemented, and/or a storage medium on which the private key is stored (see *DATA 28* in *Fig. 5*), and/or a signature method using the private key (see for example, *paragraphs [0011]-[0012] and [0033]*), and/or a storage medium on which the said signature method is stored (see *DATA* in *Fig. 5*; for example, *paragraphs [0008],[0012] and [0030]*).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wildish** in view of "Miyazaki" et al. (US 2004/0123107 A1, referred as "**Miyazaki**" hereinafter).

As per Claims 10-12, Wildish teaches,

receiving a message signed with a private key (see *the packet switched network* in *Fig. 3*), reading, in the digital certificate, data identifying means of generating the private key (see *Fig. 2*) and/or means of storing the private key on a medium and/or means of signing with the private key (see *Fig. 5*).

Wildish fails to teach deducing therefrom a probability of the said private key having been used by a legitimate proprietor of the said private key, according to the said probability, accepting or refusing the electronic message; in which the message is accepted solely if the probability of the said key having been used by its legitimate proprietor is greater than a predefined value; and in which: the message is accepted if the probability is greater than a first value (VB1), a confirmation of the said message is requested if the probability is between the first value (VB1) and a second value (VB2) less than the first value, and the message is refused if the probability is less than the second value (VB2).

However, in the same field of endeavor Miyazaki teaches message is accepted solely if the probability of the said key having been used by its legitimate proprietor is greater than a predefined value (see *paragraphs [0121]-[0122], [0126] and [0135]-[0136]*).

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to combine the teachings of Miyazaki and the system of Wildish because both inventions are directed to method of securing digital networks using digital signature. One having ordinary skill in the art would be motivated to incorporate the teachings of Miyazaki in order to decide whether to accept or reject a message and verify the reliability of the signature history (see *abstract* and *paragraph [0008]* of Miyazaki).

Conclusion

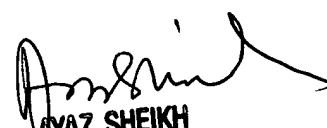
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Tabor whose telephone number is (571) 270-3155. The examiner can normally be reached on Mon-Fri 7:30a.m. to 5:00p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amare Tabor
AU 2139


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100